



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/216,036	12/18/1998	RICHARD H. WARREN	97-904CIP1	1325

7590 06/06/2005

MCDERMOTT, WILL & EMERY
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
----------	--------------

2686

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/216,036

Applicant(s)

WARREN, RICHARD H.

Examiner

Naghmeh Mehrpour

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4 and 8 is/are allowed.
- 6) ☒ Claim(s) 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/22/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed reference listed in the information Disclosure Submitted on 11/22/04 have been considered by the examiner (see attached PTO-1449).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claim 5**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Mallinckrodt (US Patent Number 5,940,753) in view of Bond et al. (US Patent Number 3,836,969).

Regarding **Claim 5**, Mallinckrodt teaches a satellite communication system wherein,

aligning a first satellite antenna 22 to illuminate a plurality of satellites (See figure 1 b, antenna on top of the car 22 is a small diameter and transmits wide beam signals to both satellites (62) and receive from one of the satellites 62, (Column 8 lines 44-53);

broadcasting a return signal from each of the plurality of satellites on the **transmitted** communication, See figure 1 b, return signal is shown generates from satellites (62(20)); and

aligning a second large satellite antenna 42 to receive the return communication signal from only one of the plurality of satellites (62(20)), (See figure 1b, the antenna 42 has a large diameter generate a narrow beam signal).

Mallinckrodt fails to teach that a satellite antenna repositioning system for repositioning the second antenna when the sun transits within the beamwidth of the second antenna, a receiver for receiving communication signals at one of the first and second antenna, the receiver including an antenna switch selector for selectively activating second antenna during periods when the sun transits within a beamwidth of the first antenna. However Bond teaches a satellite antenna repositioning system for repositioning the second antenna when the sun transits within the beamwidth of the second antenna (See figures 5a, 7, 9, Column 5 lines 23-50, Column 9 lines 3554). Bond also teaches a receiver for receiving communication signals at one of the first and second antennas, the receiver including an antenna switch selector for selectively activating second antenna during periods when the sun transits within a beamwidth of the first antenna (Column 11 lines 7-14). Therefore, it would have been obvious to the ordinary skill in the art at the time the invention was made to provide the above teaching of Bond to Mallinckrodt, in order for satellite system to avoid sun transit outage.

Allowable Subject Matter

4. **Claims 3-4, 6, 8,** are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding Claim 3, the record of prior art fails to teach a point-to-multipoint satellite communication system as specifically mentioned on Claim 3.

Art Unit: 2686

Regarding Claim 6, the record of prior art fails to teach a method of performing satellite communication in a point-to-multipoint communication system as specifically mentioned on Claim 6.

Regarding Claim 8, the record of prior art fails to teach an earth station for use in a point-to-multipoint communication system including a small satellite and plurality of adjacent geostationary satellite, the earth station as specifically mentioned on Claim 8.

Response to Arguments

Applicant's arguments filed on 11/22/04 have been fully considered but they are not persuasive.

In response to the applicant's argument that Mallinckrodt nor Bond does not disclose a method of performing satellite communication in a point to point communication system, the examiner asserts that Mallinckrodt teaches a satellite communication system wherein, aligning a first satellite antenna 22 to illuminate a plurality of satellites (See figure 1 b, antenna on top of the car 22 is a small diameter and transmits wide beam signals to both satellites (62) and receive from one of the satellites 62, (Column 8 lines 44-53); transmitting a communication signal from the first satellite antenna to the plurality of satellites, See figure 1 b, return signal is shown generates from satellites (62(20)); and aligning a second large satellite antenna 42 to receive the return communication signal from only one of the plurality of satellites (62(20)), (See figure 1b, the antenna 42 has a large diameter generate a narrow beam signal); repositioning the second satellite antenna to receive the return signal from only a second of the plurality of satellite during periods when the sun transits behind the first satellite; and receiving the return signal from the second satellite at the second satellite antenna during the periods.

Art Unit: 2686

Mallinckrodt fails to teach that a satellite antenna repositioning system for repositioning the second antenna when the sun transits within the beamwidth of the second antenna, a receiver for receiving communication signals at one of the first and second antenna, the receiver including an antenna switch selector for selectively activating second antenna during periods when the sun transits within a beamwidth of the first antenna. However Bond teaches a satellite antenna repositioning system for repositioning the second antenna when the sun transits within the beamwidth of the second antenna (See figures 5a, 7, 9, Column 5 lines 23-50, Column 9 lines 3554). Bond also teaches a receiver for receiving communication signals at one of the first and second antennas, the receiver including an antenna switch selector for selectively activating second antenna during periods when the sun transits within a beamwidth of the first antenna (Column 11 lines 7-14). Therefore, by combining the above teaching of Bond with Mallinckrodt, avoiding sun transit outage for the satellite system.

Conclusion

5. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2686

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913.

The examiner can normally be reached on 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (571) 272-7905.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

May 26, 2005